

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,134	03/19/2001	Balasubramanian Kalyanasundaram	CIS00-3379	7602
58406 7590 11/09/2007 BARRY W. CHAPIN, ESQ. CHAPIN INTELLECTUAL PROPERTY LAW, LLC WESTBOROUGH OFFICE PARK 1700 WEST PARK DRIVE WESTBOROUGH, MA 01581			EXAMINER NG, CHRISTINE Y	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 11/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/812,134

**Applicant(s)**

KALYANASUNDARAM ET AL.

**Examiner**

Christine Ng

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,7-16,18,19,22-30 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,7-16,18,19 and 22-30 is/are allowed.
- 6) ☒ Claim(s) 38-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 38-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 recites the limitation "the current resource setting" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 38 recites the limitation "the current resource setting" in line 12. There is insufficient antecedent basis for this limitation in the claim.

In claim 38 line 14: It is unclear whether or not "an actual resource usage value of the resource" is the same as "an actual resource setting" in lines 9 and 11.

In claim 38 lines 15-18, 20 and 21: It is unclear whether or not "the actual resource usage setting" is the same as "an actual resource setting" in lines 9 and 11.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 38 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,258,979 to Oomura et al.

Oomura et al discloses a method for adjusting usage of a resource (bandwidth) of a communications channel. The method comprises the steps of:

Negotiating (Figure 5) a first resource setting (Figure 5, 80M) for usage of the resource of the communications channel. The terminal equipment requests 100M of bandwidth but only 80M of bandwidth is allocable, so communication is started with a negotiated bandwidth of 80M. Refer to Column 5, lines 11-19.

Performing communications on the communications channel using the resource. The requested communication is reduced to the allocable bandwidth of 80M and communication is started. Refer to Column 5, lines 11-19.

Detecting a negotiation event (Figure 6) related to the resource when performing communications on the communications channel using the resource, detection of the negotiation event indicative of at least one of:

i) that an actual resource setting of the communications channel substantially equals the current resource setting for the communications channel. (none)

ii) that an actual resource setting (Figure 6, increased allocable bandwidth of 100M) of the communications channel substantially exceeds the current resource setting for the communications channel. During communication, the allocable bandwidth increases to 100M, which is greater than the current resource setting of 80M. This causes the system to negotiate a second resource setting. Refer to Column 5, lines 20-26.

In response to detecting, negotiating a second resource setting, the second resource setting related to an actual resource usage value of the resource of the

communications channel, if a value of the actual resource usage setting (Figure 6, increased allocable bandwidth of 100M) is higher than a former value of the actual resource usage setting (Figure 6, original allocable bandwidth of 80M), the second resource setting is calculated to be at least one of: (i) higher than a new value of the actual resource usage setting (none), and (ii) substantially equal to the new value of the actual resource usage setting (Figure 6, 100M). If the allocable bandwidth increases from the original bandwidth of 80M to a new bandwidth of 100M, the second resource setting is calculated to be equal to the new bandwidth of 100M, which is equal to the actual resource setting of 100M. Refer to Column 5, lines 20-26.

Establishing the second resource setting for usage of the resource of the communications channel. Communication continues with a bandwidth of 100M. Refer to Column 5, lines 20-26.

Oomura et al do not specially disclose that if a value of the actual resource usage setting is lower than a former value of the actual resource usage setting, the second resource setting is calculated to be lower than the first resource setting. However, in Figure 6, Oomura et al show that the allocable bandwidth can also change to be 70M, which is lower than the original bandwidth of 80M. In this case, the second resource setting is calculated to be equal to the 70M, which is lower than the first resource setting of 80M. Although Oomura et al does not specifically disclose this in Figure 6, Figure 5 shows a similar situation of when the allocable bandwidth decreases, the requested bandwidth is decreased to the allocable bandwidth. Refer to Column 5, lines 11-26.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,258,979 to Oomura et al in view of U.S. Patent No. 7,095,759 to Fitzgerald.

Oomura et al do not disclose wherein the step of negotiating a second resource setting comprises: calculating a new value for a minimum resource setting; calculating a new value for a maximum resource setting; calculating second resource setting to be a new value approximately between the value for the minimum resource setting and the value for the maximum resource setting.

Fitzgerald discloses in Figure 1 flows of data exchanged between two systems. Each flow of data is characterized by a maximum bandwidth, which is the absolute maximum bandwidth that can be assigned to a flow, and a minimum bandwidth, which is the absolute minimum bandwidth that can be assigned to a flow. Each flow uses a current bandwidth, which is between the maximum and minimum bandwidth. Refer to Column 3, line 63 to Column 4, line 29. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein the step of negotiating a second resource setting comprises: calculating a new value for a minimum resource setting; calculating a new value for a maximum resource setting; calculating

second resource setting to be a new value approximately between the value for the minimum resource setting and the value for the maximum resource setting. One would have been motivated to do so in order to ensure that the a flow of data is given its minimum assigned bandwidth but does not exceed its maximum assigned bandwidth, thereby ensuring fairness.

***Allowable Subject Matter***

7. Claim 1, 3, 4, 7-16, 18, 19 and 22-30 are allowed.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Art Unit: 2616

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Ng   
October 11, 2007

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600